CLAIMS

1. A high-strength steel pipe rockbolt comprising an expansive rockbolt main body made from a shaped pipe having one or more concavities extending along an axial direction, the shaped pipe being made from a high-strength steel sheet of 1.8-2.3 mm in thickness with tensile strength of 490-640 N/mm^2 and elongation of 20% or more.

2. The high-strength steel pipe rockbolt as defined in Claim 1, wherein the shaped pipe is coated with a Zn, Zn-Al or Zn-Al-Mg plating layer.

3. The high-strength steel pipe rockbolt as defined in Claim 1, wherein the shaped pipe has tensile strength of 530-690 N/mm^2 and elongation of 20% or more.

4. A method of manufacturing a steel pipe rockbolt involving the steps of:

(1) processing a steel sheet of 1.8-2.3 mm in thickness with tensile strength of 490-640 N/mm^2 and elongation of 20% or more to a welded pipe of 50-55 mm in outer diameter;

(2) roll-forming the welded pipe to a shaped pipe of 34.0-38.0 mm in outer diameter having one or more concavities extending along an axial direction;

(3) sizing the shaped pipe to a predetermined length;

(4) swaging both ends of the sized shaped pipe;

(5) hermetically fixing sleeves to the both ends of the shaped pipe, one end being a top to be inserted into a rockbolt-setting hole in a bedrock or ground, and the opposite end being a site for introduction of a pressurized fluid; and

(6) drilling the sleeve at the opposite end for formation of a pressure fluid inlet leading to an interior of the shaped pipe.